REMARKS

In the Office Action dated March 22, 2004, claims 1-14 and 16-19 were rejected and claim 15 was allowed. The Examiner objected to claim 16. This Response cancels claim 15 and amends claims 16-17. The amendments finds full support in the specification included herein. As will be set forth in greater detail below, Applicant respectfully submits that the pending claims are patentable over all of the prior art of record. Accordingly, reconsideration of the application in light of the amended claim, and the following remarks is respectfully requested.

In compliance with 37 CFR 1.121(g), and as suggested by the Examiner, Applicant submits herewith a replacement title to overcome the Examiner's objection to the wording of the originally submitted title.

35 U.S.C. Section 112 Rejection

Claim 16

Claim 16 stands rejected under 35 U.S.C. section 112 ¶2 as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicant regards as the invention. The Examiner asserts that claim 16 appears to be missing a preamble declaring a method or an apparatus. The Examiner, for examination purposes, interprets claim 16 to have the preamble, "A method for signal control in a satellite ground station comprising:" Applicant respectfully traverses this rejection.

Upon closer examination of the original claims, the Examiner will note that the number "16" was inadvertently inserted within original claim 15, just after the preamble of claim 15. Upon first impression, this made a claim 16 appear to exist without a preamble and the claim 15 to appear as only a preamble. Applicants note that claim 15 would have been an incomplete sentence. A correction was attempted by a preliminary amendment dated March 21, 2001, in compliance with 37 CFR 1.115. Applicant in that amendment respectfully requested the removal of the inadvertent placement of the number "16" within claim 15 to make claim 15 complete. Thus, the lack of a preamble for claim 16 could have been a moot issue and the added claims 16 - 18 would have been properly numbered. However, in light of the Examiner's statements and in order to comply with 37 CFR 1.126, Applicant cancels claim 15, and amends claim 16 with a preamble, not worded as the Examiner suggests in this

Office Action, but with the preamble of claim 15 as originally intended by the Applicant. Applicant therefore respectfully requests the withdrawal of the rejection to claim 16 under 35 U.S.C. 112.

Applicant notes that claim 17 is amended to improve the flow of the wording of that claim.

35 U.S.C. Section 103(a) Rejections

Claims 1-14 and 16-19 stand rejected under 35 U.S.C. section 103(a) as being unpatentable over U.S. Patent No. 6,256,483, Moerder et al. ("Moerder"), in view of U.S. Patent No. 6,662,018, Kintis et al. ("Kintis"). Applicant respectfully traverses the rejections.

Claim 1

More specifically, the Examiner states that Moerder discloses, "a signal control unit configured to modulate a transmission signal to said satellite in accordance with a theoretical P1db point of said system, said P1db point in correlation with a power sensor." The Examiner acknowledges that Moerder does not specifically disclose the dc current sensor recited in claim 1. However, the Examiner states that, in view of Kintis, it would have been obvious to use a dc current sensor as the power sensor. Applicant respectfully disagrees.

Although Moerder teaches power control, the power in Moerder is controlled by measuring the power transmitted at the outdoor unit, processing that measurement, and communicating that information back to the indoor unit. See Fig. 5, and column 6, lines 35-60. Moreover, to control the power, Moerder discloses a detector 84 that is preferably a schottky diode detector. See column 6, lines 52-67 and column 7, lines 1-11. This results in voltage outputs. Id. Also Moerder discloses a temperature sensor. Id. As the Examiner notes, Moerder does not disclose a dc current sensor.

Kintis also does not disclose a dc current sensor. In fact, Kintis does not disclose the measuring of dc power that is used by a transmitter. Instead, Kintis is directed towards measuring the total power in a multiple channel transmitter by generating a dc signal for each channel, which represents the transmitted power in that channel. See Kintis at Cols. 3 and 4. Kintis taps a small amount of power from each channel (at points 21, 22, 23, and 24) as well as from a multi-carrier signal (at point 32) and uses an IQ detector 66 to compare these "reference signals" to the "sampled multi-carrier signals (containing frequency and phase information). The IQ detector then generates a dc signal for each channel. (see col. 4 lines 49-67, col. 5, lines 1-20) Thus, Kintis does not disclose a dc current sensor.

In contrast, claim 1 recites "a dc current sensor." Accordingly, Applicant submits that neither Moerder nor Kintis, alone or combined, teach or suggest each and every element of claim 1. Specifically, neither Moerder nor Kintis, alone or in combination, teach or suggest, "a signal control unit configured to modulate a transmission signal to said satellite in accordance with a theoretical P1db point of said system, said P1db point in correlation with a dc current sensor." Applicant thus respectfully requests that the 35 U.S.C. section 103(a) rejection of claim 1 be withdrawn.

Claim 2

The Examiner states that Moerder discloses, "said signal control unit varying the power level of said transmitted RF signal in accordance with a power sensing means." The Examiner acknowledges that Moerder does not specifically disclose the dc current sensing means recited in claim 2. However, the Examiner states that, in view of Kintis, it would have been obvious to use dc current sensing means as the power sensing means. Applicant respectfully disagrees.

Although Moerder teaches power control, the power in Moerder is controlled by measuring the power transmitted at the outdoor unit, processing that measurement, and communicating that information back to the indoor unit. See Fig. 5, and column 6, lines 35-60. Moreover, to control the power, Moerder discloses a detector 84 that is preferably a schottky diode detector. See column 6, lines 52-67 and column 7, lines 1-11. This results in voltage outputs. Id. Also Moerder discloses a temperature sensor. Id. As the Examiner notes, Moerder does not disclose a dc current sensing means.

Kintis also does not disclose a dc current sensing means. In fact, Kintis does not disclose measuring of dc power that is used by a transmitter. Instead, Kintis is directed towards measuring the total power in a multiple channel transmitter by generating a dc signal for each channel, which represents the transmitted power in that channel. See Kintis at Cols. 3 and 4. Kintis taps a small amount of power from each channel (at points 21, 22, 23, and 24) as well as from a multi-carrier signal (at point 32) and uses an IQ detector 66 to compare these "reference signals" to the "sampled multi-carrier signals (containing frequency and phase information). The IQ detector then generates a dc signal for each channel. (see col. 4 lines 49-67, col. 5, lines 1-20) Thus, Kintis does not disclose a dc current sensing means.

In contrast, claim 2 recites "a dc current sensing means." Accordingly, Applicant submits that neither Moerder nor Kintis, alone or combined, teach or suggest each and every element of claim 2. Specifically, neither Moerder nor Kintis, alone or in combination, teach

or suggest, "said signal control unit varying the power level of said transmitted RF signal in accordance with a dc current sensing means." Applicant thus respectfully requests that the 35 U.S.C. section 103(a) rejection of claim 2 be withdrawn.

Claim 3

The Examiner states that Moerder discloses, "said power control system comprising a control unit having a modem and a power sensing mechanism." The Examiner acknowledges that Moerder does not specifically disclose a dc current sensing mechanism as recited in claim 3. However, the Examiner states that, in view of Kintis, it would have been obvious to use a dc current sensing mechanism as the power sensing mechanism. Applicant respectfully disagrees.

Although Moerder teaches power control, the power in Moerder is controlled by measuring the power transmitted at the outdoor unit, processing that measurement, and communicating that information back to the indoor unit. See Fig. 5, and column 6, lines 35-60. Moreover, to control the power, Moerder discloses a detector 84 that is preferably a schottky diode detector. See column 6, lines 52-67 and column 7, lines 1-11. This results in voltage outputs. Id. Also Moerder discloses a temperature sensor. Id. As the Examiner notes, Moerder does not disclose a dc current sensing mechanism.

Kintis also does not disclose a dc current sensing mechanism. In fact, Kintis does not disclose measuring of dc power that is used by a transmitter. Instead, Kintis is directed towards measuring the total power in a multiple channel transmitter by generating a dc signal for each channel, which represents the transmitted power in that channel. See Kintis at Cols. 3 and 4. Kintis taps a small amount of power from each channel (at points 21, 22, 23, and 24) as well as from a multi-carrier signal (at point 32) and uses an IQ detector 66 to compare these "reference signals" to the "sampled multi-carrier signals (containing frequency and phase information). The IQ detector then generates a dc signal for each channel. (see col. 4 lines 49-67, col. 5, lines 1-20) Thus, Kintis does not disclose a dc current sensing mechanism.

In contrast, claim 3 recites "a dc current sensing mechanism." Accordingly, Applicant submits that neither Moerder nor Kintis, alone or combined, teach or suggest each and every element of claim 3. Specifically, neither Moerder nor Kintis, alone or in combination, teach or suggest, "a control unit having a modem and a dc current sensing mechanism." Applicant thus respectfully requests that the 35 U.S.C. section 103(a) rejection of claim 3 be withdrawn.

Claims 8 and 16

The Examiner states that Moerder discloses, "detecting, at said control unit, a power level supplied to said transceiver unit in the presence of said signal for satellite transmission." The Examiner acknowledges that Moerder does not specifically disclose detecting a dc current supplied to the transceiver. However, the Examiner states that, in view of Kintis, it would have been obvious to detect a dc current supplied to the transceiver. Applicant respectfully disagrees.

Although Moerder teaches power control, the power in Moerder is controlled by measuring the power transmitted at the outdoor unit, processing that measurement, and communicating that information back to the indoor unit. See Fig. 5, and column 6, lines 35-60. Moreover, to control the power, Moerder discloses a detector 84 that is preferably a schottky diode detector. See column 6, lines 52-67 and column 7, lines 1-11. This results in voltage outputs. Id. Also, Moerder discloses a temperature sensor. Id. As the Examiner notes, Moerder does not disclose sensing a dc current supplied to a transceiver.

Kintis also does not disclose detecting a dc current supplied to a transceiver. In fact, Kintis does not disclose measuring of dc power that is used by a transmitter. Instead, Kintis is directed towards measuring the total power in a multiple channel transmitter by generating a dc signal for each channel, which represents the transmitted power in that channel. See Kintis at Cols. 3 and 4. Kintis taps a small amount of power from each channel (at points 21, 22, 23, and 24) as well as from a multi-carrier signal (at point 32) and uses an IQ detector 66 to compare these "reference signals" to the "sampled multi-carrier signals (containing frequency and phase information). The IQ detector then generates a dc signal for each channel. (see col. 4 lines 49-67, col. 5, lines 1-20) Thus, Kintis does not disclose detecting a dc current supplied to a transceiver.

In contrast, claim 8 recites, "detecting, at said control unit, a dc current" and claim 16 recites, "detecting, in said control unit, a current level in said signal." Accordingly, Applicant submits that neither Moerder nor Kintis, alone or combined, teach or suggest each and every element of claims 8 and 16. Specifically, neither Moerder nor Kintis, alone or in combination, teach or suggest, as in claim 8, "detecting, at said control unit, a dc current" or as in claim 16, "detecting, in said control unit, a current level in said signal." Applicant thus respectfully requests that the 35 U.S.C. section 103(a) rejection of claims 8 and 16 be withdrawn.

Claim 17

The Examiner states that Moerder discloses, "detecting a power level of said signal, analyzing a change of said power level, said change corresponding to a difference between a reference point and said detected power level . . . ." The Examiner acknowledges that Moerder does not specifically disclose the step of detecting a dc current level of the signal, recited in claim 17. However, the Examiner states that, in view of Kintis, it would have been obvious to detect a dc current level. Applicant respectfully disagrees.

Although Moerder teaches power control, the power in Moerder is controlled by measuring the power transmitted at the outdoor unit, processing that measurement, and communicating that information back to the indoor unit. See Fig. 5, and column 6, lines 35-60. Moreover, to control the power, Moerder discloses a detector 84 that is preferably a schottky diode detector. See column 6, lines 52-67 and column 7, lines 1-11. This results in voltage outputs. Id. Also Moerder discloses a temperature sensor. Id. As the Examiner notes, Moerder does not disclose detecting a dc current level.

Kintis also does not disclose detecting a dc current level. In fact, Kintis does not disclose measuring of dc power that is used by a transmitter. Instead, Kintis is directed towards measuring the total power in a multiple channel transmitter by generating a dc signal for each channel, which represents the transmitted power in that channel. See Kintis at Cols. 3 and 4. Kintis taps a small amount of power from each channel (at points 21, 22, 23, and 24) as well as from a multi-carrier signal (at point 32) and uses an IQ detector 66 to compare these "reference signals" to the "sampled multi-carrier signals (containing frequency and phase information). The IQ detector then generates a dc signal for each channel. (see col. 4 lines 49-67, col. 5, lines 1-20) Thus, Kintis does not disclose detecting a dc current level.

In contrast, claim 17 recites, "detecting a dc current level of said signal." Furthermore, claim 17 recites, "detecting a dc current level of said signal, analyzing a change of said current level, said change corresponding to a difference between a reference point and said detected dc current level." Accordingly, Applicant submits that neither Moerder nor Kintis, alone or combined, teach or suggest each and every element of claim 17. Specifically, neither Moerder nor Kintis, alone or in combination, teach or suggest, "detecting a dc current level of said signal, analyzing a change of said current level, said change corresponding to a difference between a reference point and said detected dc current level." Applicant thus respectfully requests that the 35 U.S.C. section 103(a) rejection of claim 17 be withdrawn.

CONCLUSION

In view of the foregoing, Applicant requests the withdrawal of the objection to the specification, rejection under 35 U.S.C. section 112 ¶2 to claim 16, and rejection under 35 U.S.C. section 103 to claims 1-14 and 16-19. Applicant submits that all of the pending claims are allowable over the prior art of record. Reconsideration of the application and allowance of all pending claims are earnestly solicited. Should the Examiner wish to discuss any of the above in greater detail or deem that further amendments should be made to improve the form of the claims, the Examiner is invited to telephone the undersigned at the Examiner's convenience.

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Respectfully submitted,

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